DOCUMENT RESUME

ED 276 053 CS 210 169

AUTHOR Robinson, Ann
TITLE The Effects of Teacher Probes on Children's Written Revisions.
PUB DATE [85]
NOTE 14p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; Elementary Education; Evaluation Methods; Holistic Evaluation; *Questioning Techniques; *Revision (Written Composition); Teacher Student Relationship; *Writing Evaluation; Writing Improvement; *Writing Research

ABSTRACT

A study investigated the effects of teacher probes, a type of questioning, on children's written revisions. Subjects, 260 children from grades two through six in a midwestern school district of moderate size, were randomly assigned to one of two conditions (probe or comment). Subjects in both conditions were presented with a story starter that they completed after group discussion. When the stories were returned, subjects reread and revised their stories to answer the questions written on them. Children in the probe condition received questions directed at specific content in their stories, while subjects in the comment condition received generalized remarks such as "nice job" or "tell me more." The revised stories were then marked holistically on a five-point scale. The main effect of condition was significant, indicating that children's revisions by teacher probes can produce qualitatively better text as measured by holistic ratings. The main effect of grade level was not significant, indicating that probing does not appear to be more effective at one grade level than at another. (HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED276053

The Effects of Teacher Probes on Children's Written Revisions

By Ann Robinson*

*Western Illinois University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Ann Robinson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 210169

Introduction

Revision is considered an important component of many current models of the composing process(Flower and Hayes, 1981; Gentry,1980; Humes, 1983; Nold, 1981). Such attention to revision reflects a common assumption about writing; that is, writers (especially good ones) revise. Preserved revisions of famous writers(Hildick, 1965), anecdotal evidence from articulate professional writers(Murray, 1978), and empirical studies (Faigley and Witte, 1981; Sommers, 1980; Stallard, 1974) indicate that experienced or expert writers are likely to revise throughout the composing process(Sommers, 1980) and to revise for meaning as well as make surface level changes(Faigley and Witte, 1981). However, Faigley and Witte (1981) also warn that expert adult writers demonstrate a great deal of variation in frequency and type of revision. Some revise very little; others a great deal, and the same writer may revise a memo quite differently from a manuscript. The considerable individual variation in the revising habits of experienced and presumably effective adult writers makes it difficult to generalize about the relationship between revision and writing quality.

Writing folk wisdom certainly encourages the view that first drafts should be "polished" to be improved. Many teachers believe that students hand in written work without proofreading, editing, or revising text and that the writing would be better if students "looked over" their papers and corrected errors. Logically, it is reasonable to assume that additional effort on the part of the student in the form of revising might result in

improved performance. However, in 1980, Bridwell cautioned that "Questions about the relationship between revision and qualitative improvement remain largely unanswered"(pp. 199).

Review of Selected Studies

The following review includes selected revision studies which investigate older and younger students and which purport to measure some aspect of writing quality. Not unexpectedly, the studies report mixed findings.

Specifically, an early study by Buxton(1958) found that college students who were asked to revise essays under teacher supervision made significantly greater gains on pre and post test essays than students who simply wrote without revising and a control group of students who did no writing. However, teacher comments and assigned topics also varied for the revision and the writing/no revision group. Therefore, differences between the groups could be attributed to these variables as well as to revision.

In contrast to Buxton's report that revision improved writing quality, Hansen(1978) asserted that "rewriting is a waste of time" (pp. 956). She compared college student essays from a group who wrote but were not told to revise with a group who revised on the basis of teacher corrections. She found no significant differences between the two sets of essays on measures of proofreading, editing, and general composition which led her to

conclude that revising did not result in improved texts. In addition to the difficulty of interpreting a no difference result in this manner, the effects of revision in the Hansen study were confounded with essay type. Thus, for both the Hansen and Buxton studies isolating the effects of revision on writing quality is difficult.

Studies of younger subjects also report some ambiguities. For example, the massive study of revision undertaken by the National Assessment of Educational Progress(1977) indicates that approximately 60% of the nine year olds, 78% of the thirteen year olds, and 68% of the seventeen year olds revised a first draft when asked to do so. However, the revisions did not result in reliably higher holistic ratings.

More success has been reported by Beach(1979) who examined the effects of teacher comments between first and second drafts in a sample of tenth, eleventh, and twelfth grade students. Beach compared three randomly assigned groups: between draft teacher evaluation, self-evaluation and controls who received no evaluation at all. The teacher evaluation group received greater "degree of change" ratings and higher quality ratings on at least one dimension, support. On other dimensions, sequence, sentences, language, and flavor, no significant differences were reported. Land(1984) had similiar results in a study of higher and lower ability seventh and eleventh grade students. He cued students to make revisions in their descriptive essays and found that specific cues resulted in improvement on a measure of content, but he did not report revision affected the overall quality of the writing

from first to second draft. Presumably it did not.

Two other studies, Bridwell (1980) and Hillocks (1982) found support for the positive effects of revision on overall quality. Bridwell(1980) examined twelfth graders and found revised drafts of a descriptive essay were rated significantly higher than first drafts on measures of general merit and and mechanics. In a complex factorial study, Hillocks(1982) examined the interaction of pre-writing instruction, teacher comment, and revision in a sample of seventh and eighth grade students. Four groups were compared in a pre and post-test design: observational activity with revision, observational activity/no revision, assignment with revision, assignment/no revision. Students in the assignment/revision group significantly outperformed the assignment/no revision group. Students in the observational activity/revison group did not outperform the observational activity/no revision group. The significant interaction led Hillocks to conclude that the type of instruction "coupled with the presence or absence of revison makes a difference" (pp. 273). On balance, studies which investigate the effects of revision on qualitative improvement for college and secondary students report positive effects, no effects, and mixed findings in which revision improves some aspects of writing quality but does not affect others.

Although fewer studies have experimentally investigated the effects of revison on the writing of younger children, they mirror the contradictory results reported for older student writers. Scardamalia, Bereiter, Gartshore, and Cattani(n.d.) found that

elementary shcool children did not improve the quality of their writing by revising. In contrast, Robinson and Feldhusen(1984) found that administering content probes(questions) orally to gifted sixth grade students resulted in significant differences on a measure of the quality of explanation in an expository writing task. In addition to these studies, a rich case study literature from Graves(1979) and Calkins(1979) has provided details of young children and they write and revise. Implicit in Graves' recommendations for teacher intervention in the writing classroom is the assumption that rewriting leads (or beginnings) of texts as well as other sorts of revision will lead to improved performance for primary school children.

Overall, the inconsistencies in the literature may be as Humes(1983) suspected due to the differences in the measures (holistic ratings in contrast to measures which operationalize various aspects of writing quality). The use of different designs (first draft--second draft comparisons of the same piece of writing versus pre and post test designs which may vary across topics and modes) may also obscure the issue. In addition, it is difficult to determine whether or not the relationship between revising and improvement of writing quality differs due to the age of the students. Most of the studies examine a limited age range, primarily college and high school students. Few studies have examined experimentally the effects of revison on the writing quality of young students, although the case studies (Graves,1979; Calkins, 1979; Hink, 1985) seem to indicate that teacher questions during an individual writing conference will initiate some revising

behaviors. And, in fact, the probing or questioning technique had powerful effects in the Robinson and Feldhusen(1984) study. Because teachers cannot always consult with children individually, they must also rely on written comments. Therefore, a research question with pedagogical implications is whether or not the use of written teacher probes will help children's written revisions improve the quality of their texts.

Purpose of the Study

The purpose of this study was to investigate the effects of teacher probes, a type of questioning, on the written revisions of children in grades two, three, four, five, and six.

Methods

Subjects were two hundred and sixty children, grades two through six in a midwestern school district of moderate size. Children tended to come from middle class families. Grade level breakdowns are as follows: grade 2 = 38, grade 3 = 68, grade 4 = 51, grade 5 = 53, grade 6 = 50.

Manipulations

Within classrooms, children were randomly assigned to one of

two coditions (Probe, Comment). Children in both conditions were presented with a story starter and encouraged by student teachers to brainstorm as a group ideas which might be included in the story. After classroom discussion, children were given approximately thirty minutes to complete the story. The following day, children's stories were returned to them. They were asked to reread and rewrite their stories to answer the questions their student teachers put on the original drafts. They were also permitted to make any other changes they wanted. Children in the Probe condition received questions directed at specific content in their stories. In most cases, probes were designed to elicit more information. For example, a child might be asked "What is the name of the dog in your story?" or "Where does the ghost live?" or "How does the washing machine sound?" Probes varied from child to child, but were generally who, what, where, why, and how questions. Subjects in the Comment condition received remarks like "Nice job!" or a request to correct a spelling error, or a generalized request to "Tell me more."

Measures

The revised stories were marked holistically on a scale of 1 to 5 (1 = poor, 5 = excellent). A tally of score frequencies indicated that raters used the entire range of scores, a point considered important when the measure is used to test for significant differences (Cooper, 1978). Scoring was done blind.

Only revised stories were marked so that raters did not know the condition, the classroom, or the school of the subjects. Raters did know the grade level of the students, and each rater scored only one grade level sample. The raters were trained together and scored stories in the same room (Cooper, 1978). Interrater reliability was established by an independent rater who scored twenty six stories. A reliability of .93 was established.

Design and Statistics

The design, a true experiment with post test only (Campbell and Stanley, 1963), had two factors, condition (Probe, Comment) and grade level (2, 3, 4, 5, 6). Data were analyzed by ANOVA.

Results and Discussion

The main effect of condition (Probe, Comment) was significant, ($F_{1,250} = 4.06$, $p < .05$). The main effect of grade level was not significant ($F_{4,250} = 1.63$, $p < .05$) nor was the interaction of condition by grade level ($F_{4,250} = 1.25$, $p < .05$).

The results of the significant main effect of condition indicate that children's revisions can produce qualitatively better text as measured by holistic ratings. When revising is done in response to tacher probes, children are able to revise to improve their texts. These results support Bartlett's (1982)

contention that students are able to improve their writing when their revisions are based on evaluations by teachers. Content probes, which directly take the child's message into account, appear to be an effective means of helping children improve their texts through revision.

The finding that grade level was not significant is not surprising in this study. While the literature generally reports increases in writing performance as children get older, the scoring procedures in this study were not designed to uncover. Each set of grade level raters produced their own distribution of scores: they did not compare revisions from second graders with revisions for sixth grade students. Subsequent analyses of the data through a developmental assessment model like the one recommended by Wilkensen, Barnesley, Hanna, and Swan(1980) and applied by Booley (1985) would be more sensitive to the effects of grade level.

Finally, the nonsignificant interaction indicates that probing does not appear to be more effective at one grade level than another. This is scarcely surprising since the rating procedure was not sensitive to differences across grade levels.

In conclusion, elementary children will revise when their teachers probe or question them about the content of their first drafts. More importantly, their revisions result in qualitatively better text if the probes are individually tailored to the original drafts. Perhaps the most useful aspect of this study is its ecological validity. Teachers often attempt to improve the writing of their students by writing comments on children's

papers. The present study closely resembles what real teachers actually do in their classrooms when children write. By focusing their comments on the content of student writing and by writing individually tailored probes rather than diffuse, positive comments, teachers can foster written revisions which improve the quality of children's writing.

Limitations of the study

One limitation of the present study is the reliance on a holistic measure of writing performance. Although holistic scoring is widely used, it can present difficulties for interpretation (Moss el al, 1982). Subsequent analysis of the data will include additional measures.

The second limitation is more conceptual in nature. The present analysis is not sensitive to the recursive nature of revision. Only revised, completed drafts were analyzed. In order to tease out the kinds of revision made during the initial writing, the first drafts would need to be analyzed for erasures and crossed out material. And other methods like out-loud protocols or timing latencies would be necessary to observe the relationship between planning and revision. However, this study should be viewed as an investigation of the effectiveness of one type of teacher intervention on one kind of revision and its subsequent effects on the improvement of writing quality.

References

Bartlett, E.J.(1982). Learning to revise. In What Writers Know: The Language, Process, and Structure of Written Discourse, ed. M. Nystrand, 345-363. New York: Academic Press.

Beach, R.(1979). The effects of between-draft teacher evaluation versus student self-evaluation on high school students' revision of rough drafts. Research in the Teaching of English, 13: 111-119.

Booley, H.(1984). Discovery and change: How children redraft their narrative writing. Educational Review, 36(3): 263-275.

Bridwell, L.S.(1980). Revising strategies in twelfth grade students' transactional writing. Research in the Teaching of English, 14: 197-222.

Buxton, E.(1958). An experiment to test the effects of writing frequency and guided practice upon students' skill in written expression. Unpublished doctoral dissertation. Stanford University.

Calkins, L.M.(1979). Andrea learns to make writing hard. Language Arts, 56: 569-576.

Campbell,D. and Stanley, J.C.(1966). Experimental and Quasi-experimental Designs for Research. Chicago: Rand McNally.

Cooper, C.R.(1971). Holistic evaluation of writing. In Evaluating Writing: Describing, Measuring, Judging, eds. C.R. Cooper and L. Odell, 3-31. National Council of Teachers of English.

Faigley, L. and Witte, S.(1981). Analyzing revision. College Composition and Communication, 32: 400-414.

Flower, L. and Hayes, J.R.(1981). A cognitive process theory of writing. College Composition and Communication. 32: 365-387.

Gentry, L.A.(1980). Textual revision: A review of the research (Technical Note No. 2-80/11). Los Alamitos, California Southwest Regional Laboratory for Educational Research and Development. (ERIC Document No. ED 192 355).

Graves, D.H.(1979). What children show us about revision. Language Arts, 56: 312-319.

Hansen, B.(1978). Rewriting is a waste of time. College English, 39: 956-960.

Hildick, W.(1965). Word for Word: The Rewriting of Fiction. London: Faber and Faber.

Hillocks, G.(1982). The interaction of instruction, teacher comment, and revision in teaching the composing process. Research in the Teaching of English, 16: 261-279.

Hink, K.E.(1985). Let's stop worrying about revision. Language Arts, 62: 249-254.

Humes, A.(1983). Research on the composing process. Review of Educational Research, 53(2): 201-216.

Land, R.E.(1984). Effect of varied teacher cues on higher and lower ability seventh and eleventh grade students' revision of their descriptive essays. Dissertation Abstracts International, 45(05): 1320A.

Moss, P.A., Cole, N.S., and Khampalikit,C.(1982). A comparison of procedures to assess written language skills at grades 4,7, and 10. Journal of Educational Measurement, 19(1): 37-47.

Murray, D.M.(1978) Internal revision: A process of discovery. In Research on Composing: Points of Departure, eds. D.R. Cooper and L. Odell. Urbana, Illinois: National Council of Teachers of English.

National Assessment of Educational Progress.(1977). Write/rewrite: An assessment of revision skills. Writing Report No. 05-W-04. Denver, CO.: National Assessment of Educational Progress.

Nold, E.W.(1981). Revising. In Writing: The Nature, Development, and Teaching of Written Communication. eds. C.H. Fredericksen and J.F. Dominic, 67-79. Hillsdale, New Jersey: Lawrence Erlbaum.

Robinson, A. and Feldhusen, J.F.(1984). Don't leave them alone: Effects of probing on gifted children's imaginative explanations. Journal for the Education of the Gifted, 7(3): 156-163.

Scardamalia, M., Bereiter, C., Gartshore, S., and Cattani, C.(n.d.) Locating the source of children's revision difficulties. Unpublished manuscript: Ontario Institute for Studies in Education.

Sommers, N.(1980). Revision strategies of student writers and experienced adult writers. College Composition and Communication, 31: 378-388.

Stallard, C.K.(1974) An analysis of the writing behavior of good student writers. Research in the Teaching of English, 8: 206-218.

Wilkinsen,A., Barnsley,G., Hanna,P., and Swan,M.(1980). Assessing Language Development. Oxford: Oxford University Press.